REMARKS

At the outset, the Applicants wish to thank the Examiner for the thorough review and consideration of the subject application. The Non-Final Office Action of March 27, 2003, has been received and its contents carefully noted. Claims 8-35 are amended, claims 1-7 are cancelled, and claims 36-41 are newly added. Accordingly, claims 8-41 are currently pending.

In the Office Action claims 1-5, 8-17, and 32-35 were provisionally rejected under 35 U.S.C. § 101 for allegedly claiming the same invention as claims 1-5 and 7-16 of co-pending Application No. 09/976,425; claims 6, 17, and 30-31 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being allegedly unpatentable over claims 6 and 17 of co-pending Application No. 09/976,425; claim 4 was objected as containing informalities; claims 9-12 and 32-35 were rejected under 35 U.S.C. § 112, second paragraph; and claims 1-35 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Abstracted Publication No. SU 536148A of Patent Assignee Demin A V ("Demii") combined with Japanese Patent Abstract No. JP 530943131A of Patent Assignee Ibigawa Electric KK ("Ibig") and Abstracted Publication No. SU 973509A of Patent Assignee Beloogroskii V D ("Beloi"), in view of U.S. Patent No. 3.309,437 issued to Harnett, Great Brittan Patent No. 1,480,690 issued to Madley et al. ("Madley"), and Encyclopedia of Chemical Technology authored by Kirk-Othmer. Applicants respectfully traverse these rejections and reconsideration is hereby requested.

Provisional Statutory Double Patenting Rejection

The Examiner provisionally rejected claims 1-5, 8-17 and 32-35 under 35 U.S.C. § 101 for allegedly claiming the same invention as claims 1-5 and 7-16 of co-pending Application No. 10/068,074. Applicants respectfully submit the rejections are moot in view of the claimed amendments.

Provisional Obvious Type Double Patenting Rejection

The Examiner provisionally rejected claims 6 and 17 under the judicially created doctrine of obviousness-type double patenting as being allegedly unpatentable over claims 6, 17, and 30-31 of co-pending Application No. 10/068,074. Applicants respectfully submit the rejections are moot in view of the claimed amendments.

Claim Objections

The Examiner objected to claim 4 as containing minor informalities. Applicants respectfully submit the objection is rendered moot in view of the claimed amendments.

Rejections under 35 U.S.C. § 112

The Examiner rejected claims 9-12 and 32-35 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to provide a further limitation of the claimed invention. Applicants

respectfully submit the amendments render the rejection moot as claims 9-12 and 32-35 contain different scopes and are in full compliance with 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-35 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Abstracted Publication No. SU 536148A of Patent Assignee Demin A V ("Demii") combined with Japanese Patent Abstract No. JP 530943131A of Patent Assignee Ibigawa Electric KK ("Ibig") and Abstracted Publication No. SU 973509A of Patent Assignee Beloogroskii V D ("Beloi"), in view of U.S. Patent No. 3.309,437 issued to Harnett, Great Brittan Patent No. 1,480,690 issued to Madley et al. ("Madley"), and Encyclopedia of Chemical Technology authored by Kirk-Othmer ("Kirk-Othmer). Applicants respectfully traverse these rejections and reconsideration is hereby requested.

Claim 8 is allowable over the cited references in that claim 8 recites a combination of elements including, for example, "a method for producing an abrasive carbon foam ... heating said reactive blend in a mold under a non-oxidizing atmosphere to a first temperature ranging from about 300° C to about 600° C, wherein the pressure is controlled to range from about 50 psi to about 500 psi." None of the cited references either singly or in combination teaches or suggests at least these features of the claimed invention. Accordingly, Applicants respectfully submit claim 8 and claims 9-12, which depend from claim 8, are allowable over the cited references.

Claim 13 is allowable over the cited references in that claim 13 recites a combination of elements including, for example, "a method for producing an abrasive carbon foam ... blending said particulate coal with from about 1 to about 10% by volume of a carbide precursor to form a reactive blend; heating said reactive blend in a mold under a non-oxidizing atmosphere to a first temperature ranging from about 300° C to about 600° C, wherein the first heating step includes controlling the pressure ranging from about 50 psi to about 500 psi." None of the cited references either singly or in combination teaches or suggests at least these features of the claimed invention. Accordingly, Applicants respectfully submit claim 13 and claims 14-35, which depend from claim 13, are allowable over the cited references.

Further, in levying an obviousness rejection under 35 U.S.C. § 103, the Examiner has the burden of establishing (1) some suggestion or motivation to modify the reference or to combine reference teachings, (2) a reasonable expectation of success, and (3) that the prior art references, when combined, teach or suggest all the claim limitations. See MPEP § 2143 (8th Ed., Rev. Feb 2003). "Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure." In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner's burden in levying an obviousness rejection is discussed above. The Federal Circuit recently emphasized the importance of evidencing the requisite motivation to combine references when rejecting claims based upon obviousness. In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). In the present case, the Examiner has failed to make the requisite showing, as articulated in Lee and its predecessors, of a motivation to combine Demii, Ibig, Beloi, Harnett, Madley and Kirk-Othmer. Accordingly, the Examiner has failed to establish a prima facie case of obviousness and Applicants respectfully request the rejection under § 103 be withdrawn.

Newly added claims 36-41 are allowable over the cited references in that independent claim 36 recites a combination of elements including, for example, "an abrasive carbon foam, comprising: a semi-crystalline porous coal-based structure having a density ranging from about 0.2 to about 0.5 g/cm^3, wherein the density is varied by an introduction of an inert non-oxidizing gas into a reaction vessel; and wherein the semi-crystalline porous coal-based structure includes a metallic carbide for improving abrasive character of the abrasive carbon foam." None of the cited references either singly or in combination teaches or suggests at least these features of the claimed invention. Accordingly, Applicants respectfully submit claim 36 and claims 37-41, which depend from claim 36, are allowable.

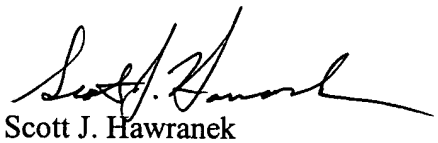
CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response; the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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